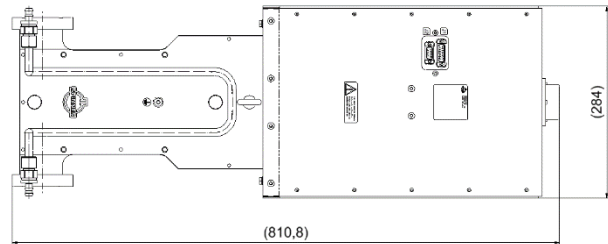
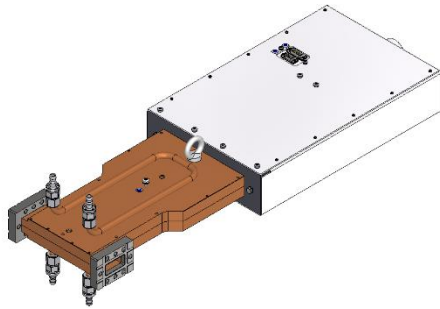


R48 PHASE SHIFTER || BN 66 19 24



**Radio frequency characteristics**

Interface type / material / surface finish	2 x R48 Riken-DESY type waveguide flange acc. to Spinner drawing A98681 / stainless steel / copper plated
Frequency range	5.712 GHz ± 5 MHz
Peak power capability, max.	25 MW*
VSWR, max.	1.10
Insertion loss, typ.	0.2 dB
Phase Shifter Range, min.	360°
Setting accuracy, max.	0.25°

- \* Conditions:
- waveguide evacuated to absolute pressure, max.  $1 \cdot 10^{-6}$  Pa ( $1 \cdot 10^{-8}$  mbar)
  - Temperature of waveguide, max. 40 °C
  - Load VSWR, max.  $\infty$
  - Pulse width, max. 4  $\mu$ s
  - Pulse repetition rate, max. 100 Hz

**General mechanical data**

Mounting position in operation	drive axis vertical
Leakage rate, max.	$2 \cdot 10^{-10}$ mbar-l/s
Case material	aluminum alloy
Case surface finish	no finish
Waveguide material	OFHC Copper
Waveguide surface finish	painted on request
Position feedback	potentiometric position transducers
Interface for stepper motor	D-SUB DE9M
Interface for limit switches and linear potentiometer	D-SUB DA15M
Interface cooling loop	Swagelok Push-On compatible for hose DN 3/8"
Absolute operating pressure cooling loop, max.	$1 \times 10^6$ Pa (10 bar)
Marking	adhesive label
Bakeable to	170°C (waveguide part only, if selected without painting)
Weight, approx.	35 kg

## R48 PHASE SHIFTER || BN 66 19 24

**General environmental conditions**

<b>Operation</b>	
Ambient temperature range	+10 to +50 °C
Relative humidity, max.	95% (condensation not permitted)
IP protection level	IP40 per EN 60529 (all interfaces connected with appropriate gaskets)
<b>Storage</b>	
Ambient temperature range	-20 to +50 °C
Relative humidity, max.	95% (condensation not permitted)

**Applicable documents**

Drawing	661924-0E
Product manual	M36392